



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/930,213

DATE: 05/09/2002

TIME: 14:21:04

Input Set : D:\Albre14.app

Output Set: N:\CRF3\05092002\I930213.raw

3 <110> APPLICANT: ROSENTHAL, ANDRE
4 HINZMANN, BERND
5 SCHAFFER, REINHARD
6 ZUBER, JOHANNES
7 TCHE-NITSE, OLEG
8 GRIPS, MARTIN
9 HELLNEGEL, MARTIN
10 SCHMITZ, ANNE-CHANTAL
11 SERS, CHRISTINE
13 <120> TITLE OF INVENTION: DETECTION OF DIFFERENTIAL GENE EXPRESSIONS
15 <130> FILE REFERENCE: ALBRE-14
17 <140> CURRENT APPLICATION NUMBER: 09/930,213
18 <141> CURRENT FILING DATE: 2001-01-31
20 <150> PRIOR APPLICATION NUMBER: DE 10004102.7
21 <151> PRIOR FILING DATE: 2000-01-31
23 <160> NUMBER OF SEQ ID NOS: 885
25 <170> SOFTWARE: PatentIn Ver. 2.1
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 459
29 <212> TYPE: DNA
30 <213> ORGANISM: Homo sapiens
32 <220> FEATURE:
33 <221> NAME/KEY: modified_base
34 <222> LOCATION: (1)
35 <223> OTHER INFORMATION: a, t, c, g, other or unknown
37 <220> FEATURE:
38 <221> NAME/KEY: modified_base
39 <222> LOCATION: (346)
40 <223> OTHER INFORMATION: a, t, c, g, other or unknown
42 <220> FEATURE:
43 <221> NAME/KEY: modified_base
44 <222> LOCATION: (396)
45 <223> OTHER INFORMATION: a, t, c, g, other or unknown
47 <220> FEATURE:
48 <221> NAME/KEY: modified_base
49 <222> LOCATION: (421)
50 <223> OTHER INFORMATION: a, t, c, g, other or unknown
52 <220> FEATURE:
53 <221> NAME/KEY: modified_base
54 <222> LOCATION: (431)
55 <223> OTHER INFORMATION: a, t, c, g, other or unknown
57 <400> SEQUENCE: 1

W--> 58 naagcccttc atcgatttat agagcttttc agagtgatgg tttctcgagc agaaattgac 60

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/930,213

DATE: 05/09/2002

TIME: 14:21:04

Input Set : D:\Albre14.app

Output Set: N:\CRF3\05092002\I930213.raw

```

59 atgttgata tccgggcaca cttcaagaga ctctatggaa agtctctgta ctcgttcate 120
60 aagggtgaca catctggaga ctacaggaaa gtactgcttg ttctctgtgg aggagatgat 180
61 taaaataaaa atcccagaag gacaggagga ttctcaacac ttgaatttt tttaacttca 240
62 tttttctaca ctgctattat cattatctca gaatgcttat ttccaattaa aacgcctaca 300
W--> 63 gctgctcct aggaatatag actgtctgta ttattattca cctatnatta ggtccattat 360
W--> 64 ggatgcttta aagctgtact tggcatttcc aaagcntata aggttataat gggagggttt 420
W--> 65 naaagtagga nttaaatatg tattccctgt tttttaaaa 459
67 <210> SEQ ID NO: 2
68 <211> LENGTH: 352
69 <212> TYPE: DNA
70 <213> ORGANISM: Homo sapiens
72 <400> SEQUENCE: 2
73 catggcatgc agaggatcta caaaatgggt tcaccaggcc tgtctacaac gctgggtgga 60
74 tgaagagcaa acaggaaaca gtacagccag agtggcatgt cctcagtga atgctgaata 120
75 cctaatagtt ttccaaaat tgggtccagt ggtttacgtc ttggatcttg cagatagact 180
76 gatctcaaaa gcctgtccat ttgctgcagc aggaataatg gtcggctcta tctattggac 240
77 agctgtgact tatggagcag tgacagtgat gcaggttgta ggtcataaag aaggtctgga 300
78 tgttatggag agagctgac ctttattcct ttaatttgg gacttcctac ta 352
80 <210> SEQ ID NO: 3
81 <211> LENGTH: 360
82 <212> TYPE: DNA
83 <213> ORGANISM: Homo sapiens
85 <220> FEATURE:
86 <221> NAME/KEY: modified_base
87 <222> LOCATION: (335)
88 <223> OTHER INFORMATION: a, t, c, g, other or unknown
90 <220> FEATURE:
91 <221> NAME/KEY: modified_base
92 <222> LOCATION: (353)
93 <223> OTHER INFORMATION: a, t, c, g, other or unknown
95 <400> SEQUENCE: 3
96 ggcacgaggc atagggctcg gcgtggtt acaggtggtt tcttgggcaa gatgggcca 60
97 ccttcaagta ttctgggac aagttcacgt gcttgaatt tgtattgttg caatttctcg 120
98 agctcctcag cctccagctc tgcgtactt ttgcaggta cagcccgctc acggtgttg 180
99 gtttgcagta caggagtctg tgggtctctg caaatcttgg tcacagaaga tttggagggt 240
100 aacagggtta tatecctt cttggctcct caaatgatat ctgttagggg ttcgtttatg 300
W--> 101 gaagtcttca acttgccttg caaggtgggc acatnatgta gaaactgttt cancaaatgt 360
103 <210> SEQ ID NO: 4
104 <211> LENGTH: 433
105 <212> TYPE: DNA
106 <213> ORGANISM: Homo sapiens
108 <220> FEATURE:
109 <221> NAME/KEY: modified_base
110 <222> LOCATION: (282)
111 <223> OTHER INFORMATION: a, t, c, g, other or unknown
113 <220> FEATURE:
114 <221> NAME/KEY: modified_base
115 <222> LOCATION: (373)
116 <223> OTHER INFORMATION: a, t, c, g, other or unknown

```

RAW SEQUENCE LISTING

DATE: 05/09/2002

PATENT APPLICATION: US/09/930,213

TIME: 14:21:04

Input Set : D:\Albrel4.app

Output Set: N:\CRF3\05092002\I930213.raw

```

118 <220> FEATURE:
119 <221> NAME/KEY: modified_base
120 <222> LOCATION: (410)
121 <223> OTHER INFORMATION: a, t, c, g, other or unknown
123 <220> FEATURE:
124 <221> NAME/KEY: modified_base
125 <222> LOCATION: (419)
126 <223> OTHER INFORMATION: a, t, c, g, other or unknown
128 <400> SEQUENCE: 4
129 gactccttca cgtcaggctc aggttccatg ggaggacgaa gcagtggacg cattgtgggc 60
130 tttaggggaca gatgagtttt ccagatagtg tcagcttatt tgaagattaa ttttctttgt 120
131 taacttaaaa taactatttt aacccttgag tggcttcttt ttaaaccaaa aaccgtcttt 180
132 ctttgctttt ttatcacagc agaatcagga tctctttctc attcaagggg ggaaccaccc 240
W--> 133 caggggcagc gctgcgcctg ctgtggccgc cgcgagccac gncctctggg attcttttgg 300
134 taccgtcact cttggcttgt gccttcaca acttctcggg tgcagatccc tatgggggga 360
W--> 135 agcttgccctc aangttctct ggaacttggt cagaagcaag cgctggggtg ggggtgtttnc 420
136 ctggggccaa ttt 433
138 <210> SEQ ID NO: 5
139 <211> LENGTH: 603
140 <212> TYPE: DNA
141 <213> ORGANISM: Homo sapiens
143 <220> FEATURE:
144 <221> NAME/KEY: modified_base
145 <222> LOCATION: (21)
146 <223> OTHER INFORMATION: a, t, c, g, other or unknown
148 <220> FEATURE:
149 <221> NAME/KEY: modified_base
150 <222> LOCATION: (339)
151 <223> OTHER INFORMATION: a, t, c, g, other or unknown
153 <220> FEATURE:
154 <221> NAME/KEY: modified_base
155 <222> LOCATION: (464)
156 <223> OTHER INFORMATION: a, t, c, g, other or unknown
158 <220> FEATURE:
159 <221> NAME/KEY: modified_base
160 <222> LOCATION: (505)
161 <223> OTHER INFORMATION: a, t, c, g, other or unknown
163 <220> FEATURE:
164 <221> NAME/KEY: modified_base
165 <222> LOCATION: (514)
166 <223> OTHER INFORMATION: a, t, c, g, other or unknown
168 <220> FEATURE:
169 <221> NAME/KEY: modified_base
170 <222> LOCATION: (519)
171 <223> OTHER INFORMATION: a, t, c, g, other or unknown
173 <220> FEATURE:
174 <221> NAME/KEY: modified_base
175 <222> LOCATION: (528)
176 <223> OTHER INFORMATION: a, t, c, g, other or unknown

```

RAW SEQUENCE LISTING

DATE: 05/09/2002

PATENT APPLICATION: US/09/930,213

TIME: 14:21:04

Input Set : D:\Albrel4.app

Output Set: N:\CRF3\05092002\I930213.raw

```

178 <220> FEATURE:
179 <221> NAME/KEY: modified_base
180 <222> LOCATION: (560)
181 <223> OTHER INFORMATION: a, t, c, g, other or unknown
183 <220> FEATURE:
184 <221> NAME/KEY: modified_base
185 <222> LOCATION: (584)
186 <223> OTHER INFORMATION: a, t, c, g, other or unknown
188 <400> SEQUENCE: 5
W--> 189 aggacgacct ccacttcata naaaacgagt agaagatgag agtctggata acacatggct 60
190 aaacaggact gacacatga ttcagactcc tggccccctg ccagcaccac aactcacatc 120
191 cactgtactg cgggagaaca gtcggcccat gggagaccag attcaagaac ctgagtctga 180
192 acatggttct gaaccagact ttttacaca tctcagatg cagatctctt ggtaggcca 240
193 gccgaagtta gaagacttaa atcggaagga cagaacagga atgaactaca tgaaagtga 300
W--> 194 aactggagtg aggcattctg ttcgggggtct aatggaggna gatgctgagc ccattcttga 360
195 agatgtgatg atgtcatccc gaagccagtt agaagatatg aatggaagaa tttggaggac 420
W--> 196 accatggggtt attgatctgc ctcccatcaa gaaatcggcg agangagagc tgagctaagg 480
W--> 197 cccagacttc ctttgactct gccanttatc catnggagnt ggattcangg atttggaat 540
W--> 198 gccctatggt tcttgaagtn ctgggaggaa attttccaaa cctnggaccc ctattaattt 600
199 tgg 603
201 <210> SEQ ID NO: 6
202 <211> LENGTH: 573
203 <212> TYPE: DNA
204 <213> ORGANISM: Homo sapiens
206 <220> FEATURE:
207 <221> NAME/KEY: modified_base
208 <222> LOCATION: (6)
209 <223> OTHER INFORMATION: a, t, c, g, other or unknown
211 <220> FEATURE:
212 <221> NAME/KEY: modified_base
213 <222> LOCATION: (87)
214 <223> OTHER INFORMATION: a, t, c, g, other or unknown
216 <220> FEATURE:
217 <221> NAME/KEY: modified_base
218 <222> LOCATION: (449)
219 <223> OTHER INFORMATION: a, t, c, g, other or unknown
221 <220> FEATURE:
222 <221> NAME/KEY: modified_base
223 <222> LOCATION: (557)
224 <223> OTHER INFORMATION: a, t, c, g, other or unknown
226 <400> SEQUENCE: 6
W--> 227 ggcacncgcc gagctcgtc agcctgcgca gccctcaca ggaggcccag cccgagtga 60
W--> 228 gtccagaagc cccccagcg gaggcgncag agtaaaagag caagcttttg tgagataatc 120
229 gaagaacttt tctccccgt ttgtttgttg gagtgggtgcc aggtactggt tttggagaac 180
230 ttgtctacaa ccagggattg attttaaaga tgtctttttt ttttttactt ttttttaagc 240
231 accaaatttt gttgtttttt tttttctcc cctccccaca gatcccatct caaatcattc 300
232 tgtaaacac cattccaaca ggtcgaggag agcttaaaca cttcttctct ctgccttggt 360
233 tctcttttat tttttatttt ttcgcacag tattaatgtt ttttgcatatc tttgcattct 420
W--> 234 tattcaaaag tgtaaaactt ctttggtcna atctatggga catggcccat atatggaagg 480

```

RAW SEQUENCE LISTING

DATE: 05/09/2002

PATENT APPLICATION: US/09/930,213

TIME: 14:21:04

Input Set : D:\Albre14.app

Output Set: N:\CRF3\05092002\I930213.raw

```

235 agatggggtg ggggtcaaaaa ggggatatca aatgaaagtg gatagggggc cacaatgggg 540
W--> 236 gaaattgaag tgggggnata acatggccaa aat 573
238 <210> SEQ ID NO: 7
239 <211> LENGTH: 487
240 <212> TYPE: DNA
241 <213> ORGANISM: Homo sapiens
243 <220> FEATURE:
244 <221> NAME/KEY: modified_base
245 <222> LOCATION: (479)
246 <223> OTHER INFORMATION: a, t, c, g, other or unknown
248 <400> SEQUENCE: 7
249 taagggtttc tctactatgt ccacttggtg aaatgcggct gacaattccg tgcggggccc 60
250 ttacatgttc tcactacaa tgttttgacg caactcttta cattcagatg aatgagaaaa 120
251 aaccaacctg ggtttgtcct gtctgtgata agaaggctcc atatgaacac cttattattg 180
252 atgqcttggt tatggaaatc ctaaagtact gtacagactg tgatgaaata caatttaagg 240
253 aggatggcac ttgggcaccg atgagatcaa aaaaggaagt acaggaagtt tctgcctctt 300
254 acaatggagt cgatggatgc ttgagctcca cattggagca tcaggtagcg tctcaccacc 360
255 agtcctcaaa taaaaacaag aaagtagaag tgattgacct aaccatagac agttcatctg 420
W--> 256 atgaagagga agaagagcca tctgccaaaga ggacctgtcc ttcctatct cccacatcna 480
257 ccactag 487
259 <210> SEQ ID NO: 8
260 <211> LENGTH: 168
261 <212> TYPE: DNA
262 <213> ORGANISM: Homo sapiens
264 <220> FEATURE:
265 <221> NAME/KEY: modified_base
266 <222> LOCATION: (147)
267 <223> OTHER INFORMATION: a, t, c, g, other or unknown
269 <400> SEQUENCE: 8
270 caaatttgtg ttgtatatat tcgtattcca tgtgttagat ggaagcattt cctatccagt 60
271 gtgaataaaa agaacagttg tagtaaatta ttataaagcc gatgatattt catggcaggt 120
W--> 272 tattctacca agctgtgctt gttggtnntt tcccatgact gtaatgct 168
274 <210> SEQ ID NO: 9
275 <211> LENGTH: 219
276 <212> TYPE: DNA
277 <213> ORGANISM: Homo sapiens
279 <400> SEQUENCE: 9
280 agagagtggg tcaaagtaga agatgctatc aaagttctcc agtgtcataa acctgtacat 60
281 gcagagtatc tggaaaagct aaagctgggt tgttccccag ccaatggaaa ttctacagtc 120
282 ccttcccttc cggataataa tgcttgttt gtaaccgctg cacagacctc tgggttgcca 180
283 tctagtgtaa gatagagaga actgggtagg cctctccca 219
285 <210> SEQ ID NO: 10
286 <211> LENGTH: 227
287 <212> TYPE: DNA
288 <213> ORGANISM: Homo sapiens
290 <220> FEATURE:
291 <221> NAME/KEY: modified_base
292 <222> LOCATION: (63)
293 <223> OTHER INFORMATION: a, t, c, g, other or unknown

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/930,213

DATE: 05/09/2002
TIME: 14:21:05

Input Set : D:\Albrel4.app
Output Set: N:\CRF3\05092002\I930213.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 1,346,396,421,431
Seq#:3; N Pos. 335,353
Seq#:4; N Pos. 282,373,410,419
Seq#:5; N Pos. 21,339,464,505,514,519,528,560,584
Seq#:6; N Pos. 6,87,449,557
Seq#:7; N Pos. 479
Seq#:8; N Pos. 147
Seq#:10; N Pos. 63,198,211,224
Seq#:11; N Pos. 22,52,343,503,527,532,580
Seq#:12; N Pos. 302,374
Seq#:14; N Pos. 342,486
Seq#:15; N Pos. 474,482,514,588
Seq#:16; N Pos. 274,419,475,488,507
Seq#:17; N Pos. 301,332
Seq#:18; N Pos. 41,56,232,240
Seq#:19; N Pos. 155,161,162,164,249
Seq#:20; N Pos. 16,427,492,551,728,744,979,1146,1243,1343,1346,1352,1423
Seq#:20; N Pos. 1535
Seq#:21; N Pos. 27,30,369,393,416,492,496,541,551
Seq#:24; N Pos. 265
Seq#:25; N Pos. 84,191,197,207,214,227,234
Seq#:26; N Pos. 82,448,491,507,525,530,548,593,614
Seq#:27; N Pos. 335,412,421
Seq#:28; N Pos. 73
Seq#:29; N Pos. 6,8,12,59
Seq#:30; N Pos. 269,388,472
Seq#:31; N Pos. 446
Seq#:32; N Pos. 125,535,544,575
Seq#:33; N Pos. 437,452
Seq#:34; N Pos. 96,294,299,306
Seq#:35; N Pos. 175,255,260,399
Seq#:37; N Pos. 2,421,451
Seq#:40; N Pos. 473,499
Seq#:41; N Pos. 45,49,124,405,435
Seq#:43; N Pos. 431
Seq#:44; N Pos. 6,12
Seq#:46; N Pos. 130,488,513,537,543,567
Seq#:47; N Pos. 277,479,484
Seq#:48; N Pos. 98,100,101,253,258,281
Seq#:49; N Pos. 573,600,619,630
Seq#:51; N Pos. 514,523
Seq#:52; N Pos. 4,11,68,219
Seq#:53; N Pos. 8,19,22,24,117,217
Seq#:54; N Pos. 4,9

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/930,213

DATE: 05/09/2002
TIME: 14:21:05

Input Set : D:\Albre14.app
Output Set: N:\CRF3\05092002\I930213.raw

Seq#:55; N Pos. 3,281
Seq#:64; N Pos. 167,175
Seq#:65; N Pos. 163
Seq#:67; N Pos. 95,315
Seq#:69; N Pos. 17,18,47,469
Seq#:70; N Pos. 103,265,274
Seq#:71; N Pos. 7,184,306
Seq#:72; N Pos. 80,89,137,196,310
Seq#:73; N Pos. 130
Seq#:74; N Pos. 109,152
Seq#:75; N Pos. 91
Seq#:76; N Pos. 277
Seq#:77; N Pos. 247
Seq#:78; N Pos. 13,102,105,231,340
Seq#:79; N Pos. 35,108,170,195,196,233,234
Seq#:92; N Pos. 401,405
Seq#:104; N Pos. 520
Seq#:107; N Pos. 397
Seq#:116; N Pos. 104
Seq#:122; N Pos. 474
Seq#:124; N Pos. 93
Seq#:128; N Pos. 154,278,338,398
Seq#:129; N Pos. 32,72,83,101
Seq#:130; N Pos. 101,411,429,460,471,489,517
Seq#:131; N Pos. 387,440
Seq#:134; N Pos. 317,318
Seq#:135; N Pos. 416,605
Seq#:143; N Pos. 532
Seq#:146; N Pos. 403
Seq#:147; N Pos. 392
Seq#:148; N Pos. 247,255,257,258,259,262,263,264,265,266,271,272,279,291
Seq#:148; N Pos. 292,295
Seq#:152; N Pos. 374
Seq#:153; N Pos. 547
Seq#:155; N Pos. 504,555,595,613,626,728,729,746
Seq#:156; N Pos. 493,641,655
Seq#:157; N Pos. 543,650,659,734,741,745
Seq#:161; N Pos. 362,418,458,477,480,484,502,508,513,530,548,549,556,557
Seq#:161; N Pos. 559,570,571,575,580,584,586,587,588,591,592,600,602,610
Seq#:161; N Pos. 614,619,621,634,637,653,663,664,668,670,674,675,679,686
Seq#:161; N Pos. 696,699,700,703,708,719,725,735,742,743,752,754,760,766
Seq#:161; N Pos. 767,774,798,802,807,813,814,817,818,828,834,836
Seq#:164; N Pos. 448,454
Seq#:167; N Pos. 332,357,362
Seq#:170; N Pos. 395
Seq#:173; N Pos. 532,593,606,627,653,658
Seq#:181; N Pos. 198
Seq#:186; N Pos. 306,335,336
Seq#:190; N Pos. 580,614,615,622,629

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: **US/09/930,213**DATE: 05/09/2002
TIME: 14:21:05Input Set : **D:\Albre14.app**
Output Set: **N:\CRF3\05092002\I930213.raw**

Seq#:192; N Pos. 95,141,223,224
Seq#:194; N Pos. 5,30,72,92
Seq#:195; N Pos. 270
Seq#:201; N Pos. 319,604,615
Seq#:202; N Pos. 622,645,655,658,706,733,742,757,772,791,793
Seq#:203; N Pos. 465,467,468
Seq#:204; N Pos. 314,350,368,376
Seq#:207; N Pos. 15,24,28
Seq#:208; N Pos. 252,253,340
Seq#:209; N Pos. 325
Seq#:211; N Pos. 17,95,238,767,775
Seq#:216; N Pos. 585
Seq#:220; N Pos. 300,363
Seq#:226; N Pos. 102
Seq#:228; N Pos. 395
Seq#:229; N Pos. 321,400
Seq#:230; N Pos. 228
Seq#:231; N Pos. 311,324
Seq#:233; N Pos. 376,381,386,393,421,427,450,486
Seq#:234; N Pos. 218,221,280,300
Seq#:236; N Pos. 227,246,255,271,287,303
Seq#:237; N Pos. 311,342,375,383,390
Seq#:238; N Pos. 356,367,387,410,423,432
Seq#:239; N Pos. 1,366,400,413,455,473,479
Seq#:240; N Pos. 54,295,314,324,331,339,348,356,368
Seq#:241; N Pos. 52,205
Seq#:243; N Pos. 25,38,52,125,302,364,406
Seq#:244; N Pos. 457
Seq#:318; N Pos. 301,332
Seq#:319; N Pos. 2,421,451
Seq#:320; N Pos. 103,265,274
Seq#:321; N Pos. 247
Seq#:322; N Pos. 13,102,105,231,340
Seq#:323; N Pos. 392
Seq#:332; N Pos. 384,449,567,576
Seq#:334; N Pos. 13,22,23,25,27,41,233,235,236
Seq#:356; N Pos. 152,154
Seq#:359; N Pos. 26,36,37,41,42,43,44,99,100,101,102,103,104,105,107,108
Seq#:359; N Pos. 113,114,116,117,118,121,130,148
Seq#:360; N Pos. 10,57
Seq#:368; N Pos. 157,159
Seq#:369; N Pos. 156,157
Seq#:374; N Pos. 161
Seq#:390; N Pos. 45,47
Seq#:398; N Pos. 88,89,91,96,107,112,118,154
Seq#:403; N Pos. 163,243
Seq#:410; N Pos. 19,181
Seq#:419; N Pos. 30,60,146,171
Seq#:423; N Pos. 74,174,196,228

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/930,213

DATE: 05/09/2002
TIME: 14:21:05

Input Set : D:\Albre14.app
Output Set: N:\CRF3\05092002\I930213.raw

Seq#:430; N Pos. 82
Seq#:437; N Pos. 63,118,155,169,200
Seq#:439; N Pos. 88
Seq#:441; N Pos. 131
Seq#:442; N Pos. 50,175,194
Seq#:450; N Pos. 50
Seq#:451; N Pos. 158,159
Seq#:453; N Pos. 36
Seq#:454; N Pos. 3,25,42
Seq#:461; N Pos. 88,91,93
Seq#:468; N Pos. 143
Seq#:469; N Pos. 83,152,197
Seq#:478; N Pos. 40,103
Seq#:490; N Pos. 178,202,208
Seq#:494; N Pos. 165,173
Seq#:507; N Pos. 244,245
Seq#:517; N Pos. 26
Seq#:522; N Pos. 229
Seq#:524; N Pos. 88,131,135
Seq#:526; N Pos. 225
Seq#:569; N Pos. 2,6,9,11,13,23,25,26,33,36,40,42,44,48,50,51,52,60,61,64
Seq#:569; N Pos. 67,70,72,73,75,77,79,81,83,89,91,92,95,98,100,105,110,120
Seq#:569; N Pos. 124,133,139,143,144,152,163,164,231
Seq#:570; N Pos. 88,89,90,93,94,95,96,97,98,99,100,101,102,103,104,105,106
Seq#:570; N Pos. 107,108,109
Seq#:572; N Pos. 57,60,63,66,70,72,76,78,98,102,113,137,154,155,156,162,163
Seq#:572; N Pos. 164,165,166,167,168,170
Seq#:583; N Pos. 1,2,6,11,13,14,28,29,40
Seq#:584; N Pos. 3,10,11,15,20,22,24,34,39,41,191,228,243,245
Seq#:585; N Pos. 3,8,9,13,18,20,22,47,51,65,68,72
Seq#:587; N Pos. 3,8,9,13,18,20,23,31,35,37,38,39,40,42,43,44,48,49,52,54
Seq#:587; N Pos. 55,58,63,65,71,73,76,78,81,82,87,105,113,183,210,213,223
Seq#:588; N Pos. 3,8,9,13,18,20,22,30,37,39,43,44,49,54,59,61,70,123,142
Seq#:588; N Pos. 154,172
Seq#:589; N Pos. 1,2,6,11,13,14,24,31,33,36,37,40,42,44,56,64,66,113,114
Seq#:590; N Pos. 4,12,28,29,32,33,36,43
Seq#:592; N Pos. 2,7,8,12,17,19,21,30,34,39,159
Seq#:617; N Pos. 249
Seq#:623; N Pos. 158,159
Seq#:627; N Pos. 166
Seq#:630; N Pos. 7
Seq#:633; N Pos. 4,16,38,51,79,98,115,188,238,255
Seq#:634; N Pos. 18,26,56,67,71,93,104,106,109,111,113,116,128,150,171,174
Seq#:634; N Pos. 182,202,234,244,245,249
Seq#:637; N Pos. 47,139,148,154,216
Seq#:638; N Pos. 149
Seq#:639; N Pos. 16,75,93,123,155,194,197,199,211,215
Seq#:640; N Pos. 8,10,22,151,159,174,211,226,227,241
Seq#:646; N Pos. 85

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/930,213DATE: 05/09/2002
TIME: 14:21:05Input Set : D:\Albre14.app
Output Set: N:\CRF3\05092002\I930213.raw

Seq#:647; N Pos. 79
Seq#:654; N Pos. 9,12,19
Seq#:656; N Pos. 12,13,16,28,30,33,34,41,52,53,60,61,72,83,85,86,90,96,97
Seq#:656; N Pos. 100,101,106,110,112,114,121,129,135,136,142,143,146,148
Seq#:656; N Pos. 150,153,155,156,160,161,164,165,166,169,171,175,176,199
Seq#:656; N Pos. 202,207,224,225,226,232
Seq#:657; N Pos. 19
Seq#:660; N Pos. 2,4,5,6,8,11,13,20,24,34,35,36,38,40,42,43,45,49,51,52,57
Seq#:660; N Pos. 60,64,71,73,75,80,82,83,84,85,96,99,105,106,109,112,115
Seq#:660; N Pos. 121,126,136,137,144,147,152,154,163,165,170,175,181,183
Seq#:660; N Pos. 184,186,194,195,197,208,213,214,250
Seq#:663; N Pos. 11,16,17,32,115
Seq#:665; N Pos. 31,35,36,42,69,71,82,93,97,112,116,119,120,122,135,137,145
Seq#:665; N Pos. 149,151,154,155,159,160,174,177,197,198,208,210,250
Seq#:666; N Pos. 6
Seq#:671; N Pos. 16,20,21,26,35,47,51,66,69,73,86,92,93,99,111,114,121
Seq#:673; N Pos. 102,137
Seq#:677; N Pos. 255
Seq#:678; N Pos. 97,199
Seq#:680; N Pos. 199
Seq#:682; N Pos. 17,51,107,113,115,132,134,144,155,165,166
Seq#:683; N Pos. 33
Seq#:685; N Pos. 127,138,148,150,210,228,251
Seq#:686; N Pos. 11,14,15,94,113,117,127,151,165,177,188,198,223,231,241
Seq#:686; N Pos. 254
Seq#:689; N Pos. 25,215
Seq#:690; N Pos. 24,35,43,46,60,63,91,105,108,116,119,124,127,132,136,140
Seq#:690; N Pos. 150,182,200,205,213,216,224,234,239,241,252
Seq#:692; N Pos. 50,69,121,209,228,230
Seq#:696; N Pos. 60,67,174,181
Seq#:697; N Pos. 144,172
Seq#:698; N Pos. 6,189
Seq#:700; N Pos. 75,108,110,147,190
Seq#:706; N Pos. 150
Seq#:709; N Pos. 18
Seq#:710; N Pos. 138
Seq#:712; N Pos. 141,190
Seq#:715; N Pos. 202,210,254
Seq#:716; N Pos. 15,26,43
Seq#:717; N Pos. 13,39
Seq#:720; N Pos. 127
Seq#:724; N Pos. 1,2,10
Seq#:726; N Pos. 221
Seq#:729; N Pos. 231
Seq#:731; N Pos. 4,13,16,25,27,48,61,65,70,85,89,94,98,103,106,111,116,117
Seq#:731; N Pos. 118,130,135,138,142,143,144,147,150,156,161,165,166,167
Seq#:731; N Pos. 168,178,184,186,187,192,193,194,199,208,217,218,221,223
Seq#:731; N Pos. 225,226,229,231,236,237,240,242,247,250,253,254,255
Seq#:734; N Pos. 93,208,216

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/930,213DATE: 05/09/2002
TIME: 14:21:05

Input Set : D:\Albrel4.app

Output Set: N:\CRF3\05092002\I930213.raw

Seq#:738; N Pos. 135,137
Seq#:746; N Pos. 145,148
Seq#:747; N Pos. 50,126,171
Seq#:754; N Pos. 70,76,132,149,189,198,242,249
Seq#:758; N Pos. 93,107,116,125,133,138,141,152,160,164,169,170,172,174,175
Seq#:758; N Pos. 184,187,194,196,204,208,212,215,217,218,221,227,230,251
Seq#:758; N Pos. 252,255
Seq#:759; N Pos. 30,62
Seq#:763; N Pos. 37,47,54,58,71,74,77,85,87,90,94,96,97,104,110,123,124,134
Seq#:763; N Pos. 140,146,149,152,153,155,162,165,175,178,180,184,191,200
Seq#:763; N Pos. 202,206,207,208,210,215,217,219,224,232,238,243,245,251
Seq#:764; N Pos. 38,169,197,220
Seq#:766; N Pos. 4,29,30,32,45,52,55,59,84,87,88,95,112,145,158,164,174,186
Seq#:766; N Pos. 237,245,255
Seq#:768; N Pos. 53,68,72,115,132,151,202,206,207,210
Seq#:772; N Pos. 3,14,19,20,22,237,242
Seq#:775; N Pos. 94
Seq#:779; N Pos. 32,35,39,80
Seq#:780; N Pos. 31,239,245
Seq#:784; N Pos. 52,169,252,253
Seq#:785; N Pos. 80
Seq#:787; N Pos. 8
Seq#:790; N Pos. 2
Seq#:791; N Pos. 217,252
Seq#:795; N Pos. 9,12,21,34,47,56,69,71,101,128,211,251
Seq#:797; N Pos. 80,131
Seq#:801; N Pos. 20,33,48,90,95,116,127,166,172,184,185,190,196,199,201,205
Seq#:801; N Pos. 207,208,210,212,223,226,228,230,236,240,243,249,252
Seq#:802; N Pos. 139,153,162,165,213,233,237,254
Seq#:803; N Pos. 1,10,22,43,62,68,84,89,116,129,159,170,174,176,180,200,205
Seq#:803; N Pos. 206,210,214,219,223,228,233,245,247,254
Seq#:805; N Pos. 1,5,11,14,21,22,30,33,60,67,68,73,75,76,77,78,91,97,105
Seq#:805; N Pos. 110,138,151,159,162,164,166,167,169,171,175,178,180,181
Seq#:805; N Pos. 182,183,184,186,195,199,211,218,221,224,226,236,237,241
Seq#:805; N Pos. 252
Seq#:806; N Pos. 3,4,5,7,12,16,26,27,30,37,38,52,54,59,62,65,70,105,109,123
Seq#:806; N Pos. 134
Seq#:807; N Pos. 175
Seq#:808; N Pos. 12,70,122,245
Seq#:810; N Pos. 6,22,33,45,61,66,78,86,107,147,149,160,166,168,169,170,177
Seq#:810; N Pos. 184,186,190,191,193,195,196,197,200,201,202,204,217,219
Seq#:810; N Pos. 221,222,224,226,236,240,247,250,252
Seq#:811; N Pos. 127,136
Seq#:812; N Pos. 100,108,132,144,151,197,213,215,227
Seq#:814; N Pos. 39,115,131,134,150,152,173,175,201,209
Seq#:819; N Pos. 115,151,198,252,254
Seq#:821; N Pos. 14
Seq#:822; N Pos. 1,2,3,4,5,6,7,8,19,189
Seq#:823; N Pos. 13,32,46,59,77,87,88,98,99,103,105,107,109,116,118,119,121

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/930,213

DATE: 05/09/2002
TIME: 14:21:05

Input Set : D:\Albre14.app
Output Set: N:\CRF3\05092002\I930213.raw

Seq#:823; N Pos. 122,126,128,133,149,151,159,173,175,178,187,190,192,193
Seq#:823; N Pos. 229
Seq#:824; N Pos. 6,13,130,221
Seq#:826; N Pos. 12,95,130,170,183,185,205,210,223,236,238
Seq#:829; N Pos. 61,64,66,67,74,75,76,78,81,87,89,94,95,102,106,111,113,117
Seq#:829; N Pos. 121,131,132,134,142,148,149,154,163,171,172,180,190,197
Seq#:829; N Pos. 203,205,206,209,216,220,229,233,239,242,253
Seq#:831; N Pos. 79,84,100,142,154,169,183,222,229,246
Seq#:833; N Pos. 8,169,214
Seq#:835; N Pos. 23,32,33,45,73,78,132,140,141,145,177,186
Seq#:836; N Pos. 1,7,13,14,18,19,20,22,27,28,42,45,50,52,55,56,57,58,117
Seq#:836; N Pos. 133,182,220,224,230
Seq#:837; N Pos. 12,13,85,115,150,162,190
Seq#:838; N Pos. 15,27,44,76,81,112,115,118,133,137,148,162,168
Seq#:839; N Pos. 5,6,9,26,44,88,89,111,123,128,137,141,153,155,162,173,174
Seq#:839; N Pos. 179,210
Seq#:840; N Pos. 181,222,228
Seq#:841; N Pos. 39,44,45,46,47,67,100,109,110
Seq#:842; N Pos. 209,245,253
Seq#:844; N Pos. 22,36,115,129
Seq#:845; N Pos. 220
Seq#:846; N Pos. 2,5,9,10,26,36,39,42,48,52,56,63,73,76,106,107,114,122,128
Seq#:846; N Pos. 130,131,135,141,143,146,156,157,178,183,184,185,187,191
Seq#:846; N Pos. 198,200,203,204,205,213,214,220,229,247
Seq#:848; N Pos. 4,8,16,31,33,35,54,78,88,115,122,155,161,182
Seq#:850; N Pos. 45,63,73,91,101,106,166,170,203,214,234
Seq#:851; N Pos. 35,39,44,45,49
Seq#:857; N Pos. 4,6,26,49,121,137,154,169,197
Seq#:861; N Pos. 1,3,7,10,42,50,64,73,88,111,119,127,132,137,139,142,148
Seq#:861; N Pos. 158,161,163,179,183,197,212,217,228,240,243,244,247,250
Seq#:863; N Pos. 49
Seq#:865; N Pos. 33,136
Seq#:872; N Pos. 7
Seq#:874; N Pos. 209
Seq#:875; N Pos. 148,149,158,165,168
Seq#:878; N Pos. 85,86,87
Seq#:880; N Pos. 59,86,87,90,91,92,97,98
Seq#:881; N Pos. 85,86,87,88,91,94,100,101,103,104,105,106,107,108
Seq#:882; N Pos. 82,83,92
Seq#:885; N Pos. 86,88,144,159

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/930,213

DATE: 05/09/2002

TIME: 14:21:05

Input Set : D:\Albrel4.app

Output Set: N:\CRF3\05092002\I930213.raw

L:58 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:63 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:300
L:64 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:360
L:65 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:420
L:101 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:300
L:133 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:240
L:135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:360
L:189 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:194 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:300
L:196 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:420
L:197 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:480
L:198 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:540
L:227 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:228 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:60
L:234 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:420
L:236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:540
L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:420
L:272 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:120
L:312 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:60
L:314 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:180
L:357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:362 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:300
L:365 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:480
L:366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:540
L:390 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:300
L:391 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:360
L:429 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:300
L:432 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:480
L:467 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:420
L:468 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:480
L:469 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:540
L:507 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:240
L:509 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:360
L:510 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:420
L:511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:480
L:534 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:300
L:562 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
L:565 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:180
L:596 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:120
L:598 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:240
L:677 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:684 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:420
L:685 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:480
L:686 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:540
L:689 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:720
L:693 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:960
L:696 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:1140
L:697 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:1200

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/930,213

DATE: 05/09/2002

TIME: 14:21:05

Input Set : D:\Albre14.app

Output Set: N:\CRF3\05092002\I930213.raw

L:699 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:1320
L:700 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:1380